Team Science and Tenure: Is there a conflict?

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Goals

- Review our current situation
- Consider solutions to build a support system for academic careers that include a major contribution to team science

Team Science

- Not large scale:
  - RO1
  - Program Project
- Large scale
  - SPOREs, EDRN, and transdiscplinary Centers (TTURC, TREC, etc)
  - Consortium
    - Through large scale studies the identity of the individual investigator becomes more difficult
    - The time commitment to building collaborations across institutions and even countries, and sustain the team effort increases

Tenure

- **Investigator criteria – HMS**
- Serve as associate professor with major accomplishments in research
- Continued publication of exceptional, original, and innovative research findings, and / or important clinical applications of basic science

Tenure (2) USC

- Promotion to associate professor with tenure requires evidence of independent research as reflected through funding (at least the equivalent of 2 RO1s – at onetime), and having a national impact on an area of research expertise as reflected through referee letters (of people with whom you have not collaborated) and publications in highly ranked journals

Large scale biomedical science (IOM report)

- Among difficulties addressed by committee was recruitment and retention of qualified scientific managers and staff for large scale projects
- Our challenge is the scientific leadership – training, retention, and promotion

  - Large-scale biomedical science. Exploring strategies for future research. NCPB/IOM 2001

Current portfolio: breast 07/2004

Topic	**Number of PIs (of 130)**
Network/consortium	15
Molecular epi	24
Cohort studies (several 4 corner sites)	16
Regional var/drugs	14
Biomarkers	12
Diet	11
BRCA1	9

Current portfolio: lung 07/2004

Topic	**Number of PIs (of 51)**
Network	7
Molecular epi	12
Cohort (incl. 3 AIAN sites)	9
Environ/occupation	8
Diet	4
Survival	3

Where are we?

- Consortia type activities are already a common feature of the epidemiology programs at NCI
- Our training programs do not offer any record of focus on how to prepare for participation in these large scale efforts
- Promotion criteria do not yet reflect these activities

Where are we, cont…

- Evaluation of large scale studies is still not explicit, so we cannot link to promotion
- Increasing pressure on evaluation of large initiatives – even program project review criteria now include impact of journal articles arising from the PPG
  - Will this help participants in consortia as the combined effort should be greater than the sum of its parts?
  - What criteria of success would we want?

Solutions

As leaders in the field we must:

Work together to develop mechanisms to identify the contribution of the many individuals

- Web site for consortium listing keep contributions that may span across projects. This is then readily available for others to access
- Footnotes in specific journal articles listing contributions
- Other mechanisms

Solutions (2) - promotion

- Support junior investigators through the promotion system
  - Educate academic leaders (deans, provosts, department chairs, and other decision makers) that we can make major contributions through team science
  - Work to revise promotion “rules” to accommodate team science

Solutions (3)

- Improve peer review process for consortia
- We need journals to allow long lists of authors – or other solutions – see Thun presentation Tuesday morning
- We need to maintain funding of the basic components that feed into the consortia activities
- We need best practices readily identified
  - EGRP can be repository

Do we have a conflict?

- No, we have challenges
- The solutions are still to be defined
- We can frame the evaluation of large endeavors, and support the contributors to sustain academic careers and the research funding base